

ABSTRACT OF THE DISCLOSURE

A method of manufacture of gypsum board having inorganic fiber, preferably glass fiber, face sheets which have been completely impregnated with a gypsum slurry so as to penetrate through said random interstices between the inorganic fibers and to thereby coat the board surfaces gypsum slurry. A gypsum board product is formed by passing the wet gypsum board through a board forming station having double forming plates, an upper forming plate having at least a portion thereof being set at a predetermined angle relative to a lower forming plate and having a separation between the forming plates defining a predetermined dimension substantially equal to the desired thickness of the manufactured gypsum board product. The multiplayer gypsum board may have a polymeric compound added to unset gypsum the compound may comprise any of the following: polyacrylamide, polymethylacrylamide, polyvinylidene chloride (PVDC), Nylon[®], polyvinylchloride (PVC), polyethylene, cellulose acetate, Bunyl[®] Rubber, polycarbonate, polypropylene, polystyrene, Neoprene[®], Teflon[®], natural rubber, poly (2,6 dimethyl pentene oxide), poly 4, methyl pentene-1 and polydimethyl siloxane. A multilayer gypsum board made according to the inventive method and comprising a first layer of a mixture of set gypsum having an outer surface and the polymeric compound additive entrained within the set gypsum and being impregnated in a thin sheet of randomly aligned inorganic fibers so as to essentially encase the core gypsum within two facing layers having a combination set gypsum and polymeric compound combination. An edger bar assembly used in a gypsum board forming device for manufacturing the inventive gypsum board in comprising at least two edger bar mounting bases mounted on pneumatic arms at opposite lateral ends, a longitudinal edger bar extending between edger bar mounting bases, each of the ends including a flapper edge mechanism attached thereto, said flapper edge mechanism having an inboard surface abutting the edge of the gypsum board for retaining unset slurry skimmed off the surface of the wet gypsum board by said edger bar from overflowing onto the belt.